

Putting Public Health Services

into

Practice in the Jail

With the marked growth in prison and jail populations over the past two decades, corrections and health care professionals have come to realize that chronic and infectious diseases and mental illness are concentrated in correctional populations. They are also recognizing the extent to which this circumstance presents a public health opportunity.

The link between correctional health, community health, and public health is particularly important and challenging for jails, where the number of individuals passing through and returning to the community is much higher than in prisons. Because of inmates' limited access to regular health care and their high incidence of risky behaviors, it is important to engage them in ongoing care. Even though the jail population is predominantly young, over 20% of the population have chronic diseases. Developing continuity of care will diminish the spread of disease in the community and will shift some aspects of health care away from hospitals and emergency rooms.

The Correctional Center and the Community

The Hampden County Correctional Center (HCCC) is a medium security correctional center located in western Massachusetts. HCCC serves Hampden County and metropolitan Springfield-Holyoke, with a population of about 500,000.

The facility houses 1,800 inmates, both detainees awaiting court appearances and sentenced prisoners. Roughly a third of inmates remain 3 days or less, another third for 4 to 90 days, and the final third for 91 days to 2 years. About 75% of the jail population comes from four neighborhoods/catchment areas within the county, each of which has a community health center.

From 2% to 3% of the population from the health centers' primary neighborhoods are in the jail at any given time, and 4% to 5% pass through annually. HIV rates are high in these neighborhoods and even higher within the facility: 5.5%

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seropositivity in men and 8.8% in women at entry in 1996. (A more recent report, in 2002, indicated that, of 681 inmates voluntarily tested, only 15 were positive, or 0.89%. This finding is felt to be due to effective programs for prisoners in education and prevention.) On any given day at HCCC, there are between 60 and 80 cases of HIV and approximately 20 persons being treated for latent TB; annually, more than 1,400 cases of sexually transmitted diseases are treated.

The Public Health Model

To address the needs of this seriously at-risk population, the Hampden County Correctional Center, four community health centers, and the Massachusetts Department of Public Health developed a cooperative public health model for corrections. The public health model arose out of a philosophy that recognizes that the jail is an integral part of the community, that those incarcerated are only temporarily displaced members of the community, and that incarceration presents an opportunity to benefit the health of these individuals, their parents and families, and the communities to which they return.

The public health model features five major elements:

- Early detection and a comprehensive assessment of health problems;
- Prompt and effective treatment at a community standard of care;
- Disease prevention programs;
- Comprehensive health education; and
- Continuity of care in the community via collaboration between the HCCC Health Services Department, community health centers, and other local health care providers.

The model as implemented at HCCC includes five key features:

- **Assignment to health team based on zip code.** At admission, inmates with serious chronic medical conditions are assigned to one of four health care teams based on their residential zip code. The HCCC health care teams include one or two physicians, a primary nurse, a nurse practitioner, and two case managers as well as an RN case manager for complicated medical cases and a mental health discharge counselor available for consultations. The physicians and case managers are dually based at the community health center and the correctional facility, and the primary nurse and nurse practitioner are based only at the correctional center.
- **Contracts with community providers.** HCCC has entered into contracts with local community health centers, mental health care, dental health care, and optometry non-profit vendors to deliver services on-site and in the community.

- **Daily triage system.** Registered nurses and masters level mental health clinicians go directly to inmates' living quarters to assess their health status, deliver care via protocols, and respond to non-emergency complaints.
- **Health education.** Comprehensive health education is provided to inmates, especially on the prevention of infectious diseases including HIV and hepatitis, substance abuse, and disease management/self care for patients with chronic disease.
- **Extensive discharge planning and follow-up.** Discharge planning and follow-up are promoted, with the dually based health care providers delivering continued care at their health centers after inmates are released from jail.

It is important to note that the full model (dually based provider teams, case management, discharge planning, and arrangement of post-release appointments) is generally available only to inmates with serious chronic medical conditions, although other inmates in need of short-term attention to medical issues may be eligible on a case-by-case basis. In general, inmates with mental health problems do not receive services from the dually based provider teams. Rather, their HCCC-based discharge planner refers them to appropriate community-based mental health services.

Many elements of this public health model of correctional care are beginning to be implemented in other jail and prison facilities around the nation.

Benefits of the Public Health Model

A comprehensive public health program consisting of early detection and assessment, health education, prevention, treatment, and continuity of care can reduce the incidence and prevalence of disease in correctional facilities and communities. The public health model values wellness, treatment of disease, prevention of illness, and access to care during and after incarceration.

This model delivers high-quality health care based on community standards and establishes close links with providers in the communities to which inmates return. These links ensure continuity of care and the ongoing management of medical and mental health problems. The dual basing of providers at the correctional facility and in the community allows for substantial collaboration between corrections and health care professionals.

HCCC admits and releases more than 5,000 inmates every year. Although inmates are generally in jail for only a few months, the time of incarceration has often been beneficial for them medically. While incarcerated, they receive comprehensive health care treatment and learn to appreciate the value and results of ongoing medical care. Gradually, inmates value health care delivered by providers who are interested in their welfare, and they become more active partners in their own care and treatment. Medical empowerment is a major goal of the program.

Evaluation Findings

HCCC has seen many specific benefits of its public health model of correctional health care, as identified through studies conducted at HCCC.

Improved Inmate Health

- The individual inmate's serious and often unmet health care needs are addressed and ongoing treatment is maintained via discharge planning and continuity of care in the community.
- Providers working at community health centers are often from the local community served and represent the culture of the neighborhood. When staff demonstrate cultural and linguistic competence, communication, and trust, the relationship between inmates and their caregivers is enhanced.
- More than 88% of HIV-positive inmates referred for ongoing care after release from HCCC keep their initial medical appointments at a designated community health center.
- The educational components of the model raise inmates' awareness of their risks for communicable disease and teach them ways to reduce that risk to improve overall health. Inmates learn to manage their own chronic diseases, such as diabetes, to prevent complications.

Improved Public Health

- Each year, the HCCC program introduces comprehensive health care to thousands of high-risk persons who previously went untreated. Most inmates are uninsured, poor, and under-educated about health issues.
- Public health improvement results from immediate care after release. For infectious diseases, adequate treatment and education to prevent future transmission provide tangible public health benefits to the inmates' families, sexual partners, and communities. Early detection and treatment of infectious diseases prevent costly complications.
- The community benefits from the provision of curative treatment for communicable disease, the prevention of secondary infections, and surveillance of reportable medical conditions. Given the number of infectious diseases detected in jails, these facilities may be the first to identify emerging trends in communicable disease patterns, such as the surge in TB in the late 1980s and early 1990s.
- Jails serve a sentinel function for the community. If a jail detects a sudden increase in sexually transmitted diseases, it can warn local public health officials that an outbreak or marked increase may be occurring in the community. Because inmates are admitted to jail directly from the community, the jail becomes a reflection of the community.

- Inmates who have been educated in how to avoid the spread of disease may be less likely to infect others, benefitting overall community health.
- Community health center workers continue linkages via outreach and follow-up once an inmate has returned to the community. They support disease management, recovery from addiction, and the prevention of disease transmission.
- Family and social ties are strengthened as inmates and their families receive care at local clinics. In turn, stronger social ties improve individual and community health.
- Immunizations against hepatitis A and B provided to at-risk inmates improve community immunity and interrupt disease transmission.
- Prenatal care provided to women while in jail improves birth outcomes, prevents vertical transmission of diseases such as HIV, and educates women about well baby care, childhood immunizations, and nutrition.
- Mental health care and substance abuse treatment begun in jail and continued in the community improve overall public health, individual employability, and family and social functioning.
- The public health model lends itself to research projects. The scientific literature needs more research and outcome studies on correctional health issues. Grants to support research are becoming more common in corrections, and research funds often allow program enhancements that otherwise would not occur. Employing staff who have an orientation toward research is extremely helpful in obtaining outside funding and conducting research.

Cost Savings

- Significant downstream savings in community health care costs result from the early and effective detection and treatment of disease.
- In fiscal year 1998, the cost of health care at HCCC was \$7.23 per day per inmate, less than the average of \$7.89 per day per inmate in a 2001 study of the 30 largest U.S. jails.
- Grants and state contracts have provided substantial funds for HIV/AIDS education, STD and TB screening and treatment, a pilot study of urine chlamydia screening, and reimbursement for HIV medications.
- Substantial savings are realized by using community-based, non-profit providers for health care, pharmacy, dental care, optometry, health education, and mental health services. These services are provided at lower cost than if HCCC used its own staff under state payroll or negotiated salary requirements.

- Community cost-savings are achieved by enrolling eligible inmates into Medicaid, which helps to ensure that, upon release, patients will use community health care services instead of more costly emergency rooms for primary care treatment.
- An in-depth and ongoing study of the cost-effectiveness of treating inmates with HIV/AIDS concluded that the HIV/AIDS programs likely pay for themselves when all costs to society are considered. Potential indirect savings could be as high as \$270,000 per participant, depending on adherence and on assumptions about transmission rates and treatment in the absence of the HCCC program.
- Using an economic analysis model based on costs, demographics at HCCC, and effectiveness data from the scientific literature, our research found that providing HIV counseling and testing was cost-saving to the community.
- The community health centers derive financial benefit from their collaboration with HCCC. Contractual agreements pay the centers an hourly rate for staff based at the jail and at health centers. The annual contracts are evaluated, modified, and renewed to cover expenses and provide a predictable source of income for health centers. After inmates are released, their health care costs are covered under third party reimbursements such as Medicaid.

Improved Public Safety

- Health care enhances public safety. When a person is healthy and receiving proper and adequate care, he/she is more likely to exhibit appropriate behaviors, thereby reducing crime in the community.
- Providing mental health and substance abuse treatment to inmates increases the likelihood of their recovery from drug addiction.
- Continued support for recovery from drug addiction can reduce future criminal activity related to acquiring illegal drugs.

Protection of Correctional Staff Safety and Health

- The facility itself benefits. With good health care, inmates are more content and cooperative. Mental health problems, which can adversely affect inmate behavior and facility operations, are properly diagnosed and treated.
- The treatment of infectious diseases among inmates protects the health of facility staff by reducing communicable disease transmission.

Better Use of the Health Care System

- A major benefit of the public health model is a dramatic decrease in the use of the emergency room as the primary care provider. With almost half of the male inmates and nearly two-thirds of the female inmates at HCCC reporting use of local emergency rooms for their health needs in the previous year, the financial and public health drain on community resources was significant. Inmates also reported frequently waiting for symptoms to become severe before seeking care, leading to the need for more costly treatment. Once inmates are released back to their community, they use the community health center to which they were assigned based on their zip code of residence.
- By establishing a relationship with a primary care provider while incarcerated, the inmate develops a greater understanding of the role of primary care, preventive care measures, and how the health care system functions in the community.
- Inmates who are more involved in their own health care acquire knowledge and skills to avoid health risks, learn about positive health behaviors, and become active partners with their providers.
- It is cost-efficient for released inmates to use community health centers to receive consistent, high-quality, primary care delivered in their neighborhoods. HCCC data show that more than 88% of inmates referred for ongoing care after release keep their initial medical appointment at their designated community health center.

Recidivism

- Researchers at HCCC have documented recidivism rates that are lower than national averages. In a 3-year study of inmates released from HCCC in 1998, 36.5% were reincarcerated in a Massachusetts correctional facility between 1998 and 2001. A national study involving prisons in 15 different states and examining a similar 3-year period showed a reincarceration rate of 51.8%. Although many factors affect recidivism rates, researchers believe the lower rate at HCCC is a result of the intensive model of comprehensive health care, education, pre-release support, and ongoing follow-up after release provided in Hampden County.

More Information Online

The Massachusetts Public Health Association Web site has made materials available online that describe the Hampden County public health model. See the Association's Web site at <http://www.mphaweb.org/hccc.html>. The resource document, *A Public Health Manual for Correctional Health Care*, is available on the web in HTML chapter format, and print copies are available on request at no charge. ■

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